Last logoff 19jun90 16:17:37
Logon file001 19jun90 14:50:07


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File   1:ERIC _ 66-90/MAY.

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b medicint

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b medicine

       19jun90 14:50:21 User208700 Session A36.1
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     $0.12  Estimated cost File1
     $0.04  Dialnet
     $0.16  Estimated cost this search
     $0.16  Estimated total session cost   0.004 Hrs.

System:OS  - DIALOG OneSearch

    File   5:BIOSIS PREVIEWS_69-90/MAY BA9001;RRM3901
             (C.BIOSIS 1990)

    File  34:SCISEARCH _ 1990 WK 1-22
             (COPR. ISI INC. 1990)
* See also files 434 (1987-89), 433 (1980-86) & 432 (1974-79)
* Use 'BEGIN SCISEARC' to search all of SciSearch
* File 34 (1989) has been rolled off into file 434. See ?news34

    File 434:SCISEARCH _ 1987-1989
             (COPR. ISI INC. 1990)
* See also file 34 (1990- ), 433 (1980-86) & 432 (1974-79)
***  SORTS ARE NOT WORKING ***

    File 433:SCISEARCH - 1980-1986
             (COPR. ISI INC. 1988)
* See also file 34 (1990- ), 434 (1987-89) & 432 (1974-79)

    File 432:SCISEARCH - 1974-1979
             (COPR. ISI INC. 1988)
* See also file 34 (1990- ), 434 (1987-89) & 433 (1980-86)

    File  48:SPORT DATABASE_1977 - JUN 90
             (COPR. SIRC 1990)

    File  72:EMBASE (EXCERPTA MEDICA)_82-90/ISS24
             (COPR. ESP BV/EM 1990)

    File 172:EMBASE (ExcerpTa Medica) 1980-81
             (Copr. ESP BV/EM 1984)

    File 173:EMBASE (ExcerpTa Medica) 1974-79
             (Copr. ESP BV/EM 1984)

    File  74:INTERNATIONAL PHARMACEUTICAL ABS. - 70-90/JUNE
             (COPR. ASHP 1990)

    File 144:PASCAL_1983 - 1990 MAR
             (C. INIST/CNRS 1990)

    File 149:HEALTH PERIODICALS DATABASE_1976-90/WEEK 23
             (COPR. IAC 1990)
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*   Format 3 is now .20 for types and .40 for prints    *
*           See ?RATES149 for more details              *
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    File 155:MEDLINE  66-90/AUG (9008W2)
  File 155 is now updated weekly

    File 157:AIDSLINE - 1980-90/JULY

    File 159:Cancerlit - 1963-90/June

    File 160:SMOKING AND HEALTH - 70-89/Dec
                  *****
    The problems in file 160 have been corrected now.
              Thank you for your patience.
                  *****

    File 218:Nursing & Allied Health (CINAHL)_83-90/May
             (c. CINAHL Corp. 1990)
**

    File 219:Clinical Abstracts - Jan 81-89/Aug
             (Corp. Reference & Index Svcs.Inc.)
** This is a closed file.  See banner for dates of coverage. **

    File 265:FEDERAL RESEARCH IN PROGRESS - MAY 1990

    File 295:WORLD TRANSLATIONS INDEX  1984 - MAY 1990
             (COPR. ITC 1990)

       Set   Items  Description
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s folliculo?(w)stellate(a)degrowth(a)factor?

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            1916  FOLLICULO?
            8410  STELLATE
             306  FOLLICULO?(W)STELLATE
         1166153  GROWTH
         2219209  FACTOR?
          135042  GROWTH(W)FACTOR?
      S1      17  FOLLICULO?(W)STELLATE AND GROWTH(W)FACTOR?
tds$1

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s s2 not py=1990

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>>>  or undefined in one or more files.
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      S3      10  S2 NOT PY=1990
t s3/7/1-10


 3/7/1      (Item 1 from file: 5)
0020844397      BIOSIS Number: 89036666
  PITUITARY FOLLICULAR CELLS SECRETE BOTH VASCULAR ENDOTHELIAL GROWTH
FACTOR AND FOLLISTATIN
  GOSPODAROWICZ D; LAU K
  CANCER RES. INST., UNIV. CALIF. MED. CENT., SAN FRANCISCO, CALIF. 94143.
  BIOCHEM BIOPHYS RES COMMUN   165 (1). 1989.  292-298.   CODEN: BBRCA
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Language: ENGLISH

Follistatin, a hormone which acts to suppress the release of follicle-stimulating hormone (FSH) by putuitary-derived gonadotrophs, has previously been identified only in the liquor folliculi of ovarian follicles. By microsequencing of fractions derived from conditioned medium, we show here that bovine pituitary-derived folliculo stellate cells are also capable of producing and secreting this hormone. These results suggest that folliculo stellate cells may serve as a source of follistatin within the pituitary itself and that the regulation of FSH release from the pituitary could therefore involve a paracrine mechanism.

3/7/2 (Item 2 from file: 5)
0020783214 BIOSIS Number: 89003098

ISOLATION AND CHARACTERIZATION OF A VASCULAR ENDOTHELIAL CELL MITOGEN PRODUCED BY PITUITARY-DERIVED FOLLICULO STELLATE CELLS

GOSPODAROWICZ D; ABRAHAM J A; SCHILLING J

CANCER RES. INST., M-1282, UNIV. CALIFORNIA MED. CENT., SAN FRANCISCO, CALIF. 94143.

PROC NATL ACAD SCI U S A 86 (19). 1989. 7311-7315. CODEN: PNASA

Language: ENGLISH

A growth factor with specificity for vascular endothelial cells has been identified in conditioned medium of pituitary-derived growth factor (FSdGF), was purified to homogeneity by a combination of heparin-Sepharose affinity chromatography, Bio-Gel P-60 exclusion chromatography, Mono S ion-exchange chromatography, and hydrophobic chromatography on a C4 reverse-phase HPLC column. FsdGF was a molecular mass of 23 kDa. FSdGF was a potent mitogen for vascular endothelial cells with activity detectable at 25 pg/ml and saturation of other cell types such as bovine vascular smooth muscle cells, corneal endothelial cells, adrenal cortex cells, granulosa cells, BLAB/MK cells, or BHK-21 cells. Microsequencing revealed an N-terminal sequence having no significant homology to any known protein. The release of FSdGF by pituitary cells and its target cell specificity raise the possibility that FSdGF may play a role in angiogenesis.

3/7/3 (Item 3 from file: 5)
0018747620 BIOSIS Number: 35127211

EFFECT OF BASIC FIBROBLAST GROWTH FACTOR FGF ON SECRETION OF PROLACTIN PRL AS ASSESSED BY THE REVERSE HEMOLYTIC PLAQUE ASSAY RHPA

LARSON G H; SORTINO M A; KOOS R A; WISE P M

DEP. PHYSIOL., UNIV. MD., SCH. MED., BALTIMORE, MD. 21201.

18TH ANNUAL MEETING OF THE SOCIETY FOR NEUROSCIENCE, TORONTO, ONTARIO, CANADA, NOVEMBER 13-18, 1988. SOC NEUROSCI ABSTR 14 (1). 1988. 517. CODEN: ASNEE

Language: ENGLISH

3/7/4 (Item 1 from file: 434)
09134975 Genuine Article#: Q8774 Number of References: 30

ACTIVATION OF ANTERIOR-PITUITARY FOLLICULO-STELLATE CELLS IN THE FORMATION OF ESTROGEN-INDUCED PROLACTIN-SECRETING TUMORS

SCHECHTER J; AHMAD N; WEINER R

UNIV SO CALIF,SCH MED,DEPT ANAT & CELL BIOL,1333 SAN PABLO ST/LOS ANGELES//CA/90033; UNIV CALIF SAN FRANCISCO,SCH MED,CTR REPROD ENDOCRINOL/SAN FRANCISCO//CA/94143

NEUROENDOCRINOLOGY, 1988, V48, N5, P569-576

Language: ENGLISH Document Type: ARTICLE

Geographic Location: USA

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WIKLUND J, 1981, V109, P1700, ENDOCRINOLOGY
ZONDEK B, 1936, V1, P776, LANCET

3/7/5 (Item 1 from file: 72)
6351268 EMBASE No: 87087924

Evidence for functional communication between folliculo-stellate cells and hormone-secreting cells in perifused anterior pituitary cell aggregates

Baes M.; Allaerts W.; Denef C.
Laboratory of Cell Pharmacology, University of Leuven, School of Medicine, Campus Gasthuisberg, B-3000 Leuven BELGIUM

ENDOCRINOLOGY (USA) , 1987, 120/2 (685-691) CODEN: ENDOA
LANGUAGES: ENGLISH

Dispersed anterior pituitary cells from adult female rats were separated by gradient sedimentation at unit gravity. The small-sized cell population on top of the gradient consisted of 65.6 + or - (SE) 4.2% (n = 8) cells immunoreactive to antiserum against S-100 protein, a marker of folliculo-stellate (FS) cells in rat pituitary. The corresponding fraction derived from adult male or immature female rats were also enriched in S-100 positive cells but to a lower extent. Only small numbers of S-100 positive cells were found in medium- and large-sized cell populations. Coaggregating the S-100 cell-enriched populations from adult females with other pituitary cell populations resulted in a clear-cut inhibition of the GH response to rat GH-releasing factor and beta-adrenergic agents, of the PRL response to TRH and angiotensin II (AII) and the LH response to LHRH. The magnitude of inhibition increased with the number of FS cells put into the coaggregates. In perifused aggregates prepared from different gradient fractions from immature females, there was a negative correlation between the occurrence of FS cells and the magnitude of the PRL response to AII. The low responsiveness to AII in FS cell enriched aggregates was not abolished when these aggregates were redissociated into single cells. It is suggested that FS cells constitute an intercellular messenger system for local inhibitory control of pituitary hormone secretion which is not based on direct and intimate contact between the interacting cells.

3/7/6 (Item 2 from file: 72)
5907206 EMBASE No: 85152716

Immunocytochemistry of folliculo-stellate cells of normal and neoplastic human pituitary gland

Morris C.S.; Hitchcock E.
Midland Centre for Neurosurgery and Neurology, Warley, West Midlands B67 7JX UNITED KINGDOM

J. CLIN. PATHOL. (ENGLAND) , 1985, 38/5 (481-488) CODEN: JCPAA
LANGUAGES: ENGLISH

Five normal human pituitaries and 20 pituitary neoplasms were investigated by immunocytochemical methods. Glial fibrillary acidic protein and S100 have been shown in the anterior lobe of the pituitary. Both these markers were present in the folliculo-stellate cell. Evidence is presented

for the presence of a transitional folliculo-stellate cell which is immunoreactive for S100. The role of the folliculo-stellate cell is discussed.

3/7/7 (Item 3 from file: 72)
5783543 EMBASE No: 85029053
Immunohistochemical detection of folliculo-stellate cells in human pituitary adenomas
Lauriola L.; Cocchia D.; Sentinelli S.; et al.
Department of Human Pathology, Universita Cattolica S. Cuore, I-00168 Roma ITALY
VIRCHOWS ARCH. (GERMANY, WEST) , 1984, 47/3 (189-197) CODEN: VAAZA
ABT. B. CELL PATHOL.
LANGUAGES: ENGLISH
In the light of recent findings concerning the presence of S-100 antigen in folliculo-stellate cells of the rat adenohypophysis, we investigated the possible presence of S-100-labelled cells in both the normal human adenohypophysis and in pituitary adenomas. Immunostaining enabled us to detect, with both light and electron microscopy, the presence of S-100-labelled folliculo-stellate cells in a significant number of pituitary adenomas, mostly growth-hormone secreting, and, as expected, in the normal human adenohypophysis.

3/7/8 (Item 4 from file: 72)
5697549 EMBASE No: 84193215
Granulated folliculo-stellate cells and growth hormone cells immunostained with anti-S 100 protein serum in the pituitary glands of the goat
Shirasawa N.; Yamaguchi S.; Yoshimura F.
Department of Anatomy, Jikei University School of Medicine, Tokyo 105 JAPAN
CELL TISSUE RES. (GERMANY, WEST) , 1984, 237/1 (7-14) CODEN: CTSRC
LANGUAGES: ENGLISH

3/7/9 (Item 5 from file: 72)
5146883 EMBASE No: 82151999
The pars distalis (anterior pituitary) in the fetal sheep: An ultrastructural study
Webb P.D.
Dep. Anat., Univ. Cambridge, Cambridge CB2 3DY UNITED KINGDOM
J. DEV. PHYSIOL. (ENGLAND) , 1981, 3/5 (319-332) CODEN: JDPHD
LANGUAGES: ENGLISH
The pars distalis from 32 fetal sheep (gestational ages ranging from 60 to 143 days), was examined by light and electron microscopy. The pars distalis was principally composed of clusters of parenchymal cells, which were a mixture of secretory and non-secretory folliculo-stellate cells. As gestation progressed the clusters grew larger and more numerous and the cytoplasm of the secretory cells became increasinly granular. From as early as the 60th day of pregnancy it was possible to recognise several secretory cell types. Mammotrophs and somatotrophs increasingly the most abundant. These cells generally showed signs of a high level of activity throughout gestation for they usually contained large secretory granules, well developed Golgi apparatus and much rough endoplasmic reticulum. The gonadotrophs, initially angular in profile, became larger, rounder and more granular as gestation progressed. Thyrotrophs and corticotrophs were sparsely distributed. The study suggests that the secretory cells of the fetal sheep pars distalis may be active in the production and secretion of hormones from at least the 60th day of pregnancy.

3/7/10 (Item 1 from file: 265)
0670639 DIALOG FILE NO. 265/266 FEDERAL RESEARCH IN PROGRESS
IDENTIFYING NO.: 5R01DK35904-05 AGENCY CODE: CRISP
Determinants of pituitary development (rats)
PRINCIPAL INVESTIGATOR: SCHECHTER, JOEL E
ADDRESS: UNIVERSITY OF SOUTHERN CALIF 1333 SAN PABLO ST LOS ANGELES, CA 90033

PERFORMING ORG.: UNIVERSITY OF SOUTHERN CALIFORNIA, LOS ANGELES, CALIFORNIA
SPONSORING ORG.: NAT INST OF DIABETES AND DIGESTIVE AND KIDNEY DISEASES
FY : 90 FUNDS: $194,139 TYPE OF AWARD: Noncompeting Continuation (Type 5)

SUMMARY: The specific interactions taking place between Rathke's pouch epithelium and mesenchyme in establishing the vasculature of the anterior pituitary are not known. Causative factors governing cytodifferentiation of cell types of the anterior pituitary are also only poorly understood. Our studies are concerned with characterizing specific aspects of the tissue interactions that function as determinants of pituitary cytodifferentiation and its vasculature. Additional studies are directed at the immunolocalization of estrogen receptor during normal ontogeny through puberty. The results of these experiments will elucidate fundamental tissue interactions governing development of the pituitary vasculature and cytodifferentiation, and also will have relevance for our understanding of pituitary tumorigenesis.

Throughout our studies we are using two rat strains, the highly estrogen-sensitive Fischer 344, and comparatively estrogen- insensitive Sprague-Dawley rats. We have demonstrated that epithelio-mesenchymal interactions, including the vasculature, are distinctly different in these rat strains, a circumstance that very likely underlies the tumor susceptibility of F344 rats.

Our experiments will determine:

1. The nature of specific interactions taking place between Rathke's pouch epithelium and its mesenchyme during normal ontogeny through puberty. We will especially follow the development of folliculo-stellate (FS) cells and correlate their development with modifications of specific components of the extracellular matrix and the distribution of fibroblast growth factor.

2. The ontogeny of estrogen receptors from fetal stages through puberty, and in estrogen-treated adults.

3. Whether the estrogen-dependency of mammotroph cytodifferentiation inhibited by alpha fetoprotein.

4. Whether kidney capsule grafts of pure FS cells from F344 and 5-D rats will themselves reveal strain specific responses to estrogen.

Methods used in our studies are light- and electron microscopy, immunocytochemistry and cryo-immunocytochemistry, and radioimmunoassay.

s growth(w)factor and endothelial?

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	1166153	GROWTH
	744399	FACTOR
	111048	GROWTH(W)FACTOR
	95197	ENDOTHELIAL?
S4	6962	GROWTH(W)FACTOR AND ENDOTHELIAL?

s s4 and vascular

Processing

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	521060	VASCULAR
S5	2365	S4 AND VASCULAR

s $5 and foll@cul?

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S6	28	S5 AND FOLLICUL?

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8/7/1 (Item 1 from file: 5)
0020909057 BIOSIS Number: 89069393

EXPRESSION OF BASIC FIBROBLAST GROWTH FACTOR IN THE RAT OVARY DETECTION OF MESSENGER RNA USING REVERSE TRANSCRIPTION POLYMERASE CHAIN REACTION AMPLIFICATION

KOOS R D; OLSON C E
UNIV. MARYLAND SCH. MED., DEP. PHYSIOL., 655 WEST BALTIMORE ST., BALTIMORE, MD. 21201, USA.

MOL ENDOCRINOL 3 (12). 1989. 2041-2048. CODEN: MOENE
Language: ENGLISH

Development of the ovarian follicle and corpus luteum involves proliferation and differentiation of several cell types: granulosa cells, thecal cells, and various stromal cells, particularly the endothelial cells that compose the rich thecal and luteal vascular networks. Basic fibroblast growth factor (bFGF) is a potent mitogen for cells of mesodermal and neuroectodermal origin, including endothelial cells. With the use of reverse transcription-polymerase chain reaction (PCR), we have examined the expression of bFGF in the rat ovary. RNA was extrcted from fetal bovine aortic endothelial cells, hypothalami of adult rats, and either whole ovaries or isolated granulosa cells from PMSG-primed immature rats. The RNA was reverse transcribed and then amplified by PCR using two oligonucleotide primers specific for both bovine and rat bFGF. A sample of the PCR solution was size fractionated by electrophoresis in an 8% polyacrylamide gel, which was then stained with ethidium bromide and examined under ultraviolet light. When reverse transcription-PCR was performed on RNA from bovine endothelial cells, rat hypothalamus, or whole rat ovary, a single major DNA band corresponding in length to the distance between the 5'-ends of the two bFGF-specificprimers (354 base pairs) was obtained. The identity of this material with the bovine and rat bFGF sequences was confirmed by restriction enzyme analysis. When RNA from isolated granulosa cells was examined, however, no bFGF mRNA was detected. These results confirm that the bFGF gene is expressed in the ovary during follicular development. Furthermore, they demonstrate that ovarian bFGF expression is cell specific, since granulosa cells do not contain detectable bFGF mRNA.

8/7/2 (Item 2 from file: 5)
0020864926 BIOSIS Number: 89047335

VASCULAR ENDOTHELIAL GROWTH FACTOR IS A SECRETED ANGIOGENIC MITOGEN

LEUNG D W; CACHIANES G; KUANG W-J; GOEDDEL D V; FERRARA N
DEP. DEVELOPMENTAL BIOL., GENENTECH, SOUTH SAN FRANCISCO, CALIF. 94080.

SCIENCE (WASHINGTON D C) 246 (4935). 1989. 1306-1309. CODEN: SCIEA
Language: ENGLISH

Vascular endothelial growth factor (VEGF) was purified from media conditioned by bovine pituitary folliculostellate cells (FC). VEGF is a heparin-binding growth factor specific for vascular endothelial cells that is able to induce angiogenesis in vivo. Complementary DNA clones for bovine and human VEGF were isolated from cDNA libraries prepared from FC and HL60 leukemia cells, respectively. These cDNAs encode hydrophilic proteins with sequences related to those of the A and B chains of platelet-derived growth factor. DNA sequencing suggests the existence of several molecular species of VEGF. FEGFs are secreted proteins, in contrast to other endothelial cell mitogens such as acidic or basic fibroblast growth factors and

platelet-derived endothelial cell growth factor. Human 293 cells transfected with an expression vector containing a bovine or human VEGF cDNA insert secrete an endothelial cell mitogen that behaves like native VEGF.

8/7/3 (Item 3 from file: 5)
0020844397 BIOSIS Number: 89036666
PITUITARY FOLLICULAR CELLS SECRETE BOTH VASCULAR ENDOTHELIAL GROWTH FACTOR AND FOLLISTATIN
GOSPODAROWICZ D; LAU K
CANCER RES. INST., UNIV. CALIF. MED. CENT., SAN FRANCISCO, CALIF. 94143.
BIOCHEM BIOPHYS RES COMMUN 165 (1). 1989. 292-298. CODEN: BBRCA
Language: ENGLISH
Follistatin, a hormone which acts to suppress the release of follicle-stimulating hormone (FSH) by putuitary-derived gonadotrophs, has previously been identified only in the liquor folliculi of ovarian follicles. By microsequencing of fractions derived from conditioned medium, we show here that bovine pituitary-derived folliculo stellate cells are also capable of producing and secreting this hormone. These results suggest that folliculo stellate cells may serve as a source of follistatin within the pituitary itself and that the regulation of FSH release from the pituitary could therefore involve a paracrine mechanism.

8/7/4 (Item 4 from file: 5)
0020783214 BIOSIS Number: 89003098
ISOLATION AND CHARACTERIZATION OF A VASCULAR ENDOTHELIAL CELL MITOGEN PRODUCED BY PITUITARY-DERIVED FOLLICULO STELLATE CELLS
GOSPODAROWICZ D; ABRAHAM J A; SCHILLING J
CANCER RES. INST., M-1282, UNIV. CALIFORNIA MED. CENT., SAN FRANCISCO, CALIF. 94143.
PROC NATL ACAD SCI U S A 86 (19). 1989. 7311-7315. CODEN: PNASA
Language: ENGLISH
A growth factor with specificity for vascular endothelial cells has been identified in conditioned medium of pituitary-derived growth factor (FSdGF), was purified to homogeneity by a combination of heparin-Sepharose affinity chromatography, Bio-Gel P-60 exclusion chromatography, Mono S ion-exchange chromatography, and hydrophobic chromatography on a C4 reverse-phase HPLC column. FsdGF was a molecular mass of 23 kDa. FSdGF was a potent mitogen for vascular endothelial cells with activity detectable at 25 pg/ml and saturation of other cell types such as bovine vascular smooth muscle cells, corneal endothelial cells, adrenal cortex cells, granulosa cells, BLAB/MK cells, or BHK-21 cells. Microsequencing revealed an N-terminal sequence having no significant homology to any known protein. The release of FSdGF by pituitary cells and its target cell specificity raise the possibility that FSdGF may play a role in angiogenesis.

8/7/5 (Item 5 from file: 5)
0019592323 BIOSIS Number: 88048355
PITUITARY FOLLICULAR CELLS SECRETE A NOVEL HEPARIN-BINDING GROWTH FACTOR SPECIFIC FOR VASCULAR ENDOTHELIAL CELLS
FERRARA N; HENZEL W J
DEP. OF PHARMACOLOGICAL SCI., GENENTECH INC., 460 POINT SAN BRUNO BLVD., SOUTH SAN FRANCISCO, CALIF. 94080.
BIOCHEM BIOPHYS RES COMMUN 161 (2). 1989. 851-858. CODEN: BBRCA
Language: ENGLISH
A growth factor vascular endothelial cells was identified in the media conditioned by bovine pituitary follicular cells and purified to homogeneity by a combination of ammonium sulfate precipitation, heparin-sepharose affinity chromatography and two reversed phase HPLC steps. The growth factor was a cationic, heat stable and relatively acid stable protein and had a molecular weight, as assessed by silver-stained SDS-PAGE gel, of .apprx. 45,000 under nonreducing conditions and .apprx. 23,000 under reducing conditions. The purified growth factor had a maximal mitogenic effect on adrenal cortex-derived capillary endothelial cells at the concentration of 1-1.2 ng/ml (22-26 pM). Further characterization of the bioactivity of the growth factor reveals that it exerts mitogenic

effects also on vascular endothelial cells isolated from several districts but not on adrenal cortex cells, lens epithelial cells, corneal endothelial cells, keratynocytes or BHK-21 fibroblasts, indicating that its target cell specificity is unlike that of any previously characterized growth factor. Microsequencing reveals a unique N-terminal amino acid sequence. On the basis of its apparent target cell selectivity, we propose to name this factor vascular endothelial growth factor (VEGF).

8/7/6 (Item 1 from file: 434)
09555997 Genuine Article#: AB147 Number of References: 178
THE BIOCHEMICAL AND IMMUNOHISTOCHEMICAL PROFILE OF THYROID NEOPLASIA
STANTA G; CARCANGIU ML; ROSAI J
UNIV TRIESTE,SCH MED,INST ANAT PATHOL/TRIESTE//ITALY/; YALE UNIV,SCH MED,DEPT PATHOL/NEW HAVEN//CT/065..
PATHOLOGY ANNUAL, 1988, V23, P1, P129-157
Language: ENGLISH Document Type: REVIEW
Geographic Location: ITALY; USA
Cited References:
ABE Y, 1981, V52, P23, J CLIN ENDOCR METAB
ALBORESSAAVEDRA J, 1983, V14, P62, HUM PATHOL
ALBORESSAAVEDRA J, 1985, V2, P137, SEMIN DIAGN PATHOL
ALDINGER KA, 1978, V41, P2267, CANCER
AMARA SG, 1982, V298, P240, NATURE
ARNALMONREAL FM, 1977, V40, P1060, CANCER
AZZALI G, 1962, V38, P1319, B SOC ITAL BIOL SPER
BATTIFORA H, 1984, V1, P251, SEMIN DIAGN PATHOL
BERGELEFRANC JL, 1985, V56, P345, CANCER
BERTAGNA XY, 1978, V75, P5160, P NATL ACAD SCI USA
BISHOP AE, 1982, V83, P902, GASTROENTEROLOGY
BLOISE W, 1963, V23, P1096, J CLIN ENDOCR
BOCKER W, 1978, V380, P205, VIRCHOWS ARCH A
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BURGDORF WHC, 1981, V75, P161, AM J CLIN PATHOL
BURT A, 1979, V3, P279, HISTOPATHOLOGY
BUSSOLATI G, 1979, V44, P1769, CANCER
BUSSOLATI G, 1967, V37, P205, J ENDOCR
BUSSOLATI G, 1973, V360, P123, VIRCHOWS ARCH PATHOL
CADY B, 1979, V43, P810, CANCER
CAPELLA C, 1978, V377, P111, VIRCHOWS ARCH A
CARAYON P, 1980, V51, P915, J CLIN ENDOCR METAB
CARCANGIU ML, 1985, V83, P135, AM J CLIN PATHOL
CARCANGIU ML, 1984, V8, P655, AM J SURG PATHOL
CARCANGIU ML, 1985, V9, P705, AM J SURG PATHOL
CARCANGIU ML, 1985, V55, P805, CANCER
CARLEI F, 1984, V1, P59, SEMIN DIAGN PATHOL
CARPENTER G, 1979, V48, P193, ANNU REV BIOCHEM
CHAMBARD M, 1983, V96, P1172, J CELL BIOL
CHARPIN C, 1982, V50, P1806, CANCER
CIVANTOS F, 1984, V8, P187, AM J SURG PATHOL
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8/7/7 (Item 1 from file: 149)

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Transforming growth factor-beta: biological function and chemical structure.

Sporn, Michael B.; Roberts, Anita B.; Wakefield, Lalage M.; Assoian, Richard K.

Science VOL.: v233 PAGINATION: p532(3)

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8/7/8 (Item 1 from file: 155)

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Thyroid angiogenesis: endotheliotropic chemoattractant activity from rat thyroid cells in culture.

Goodman AL; Rone JD

Department of Gynecology and Obstetrics, Johns Hopkins University School of Medicine, Baltimore, Maryland 21205.

Endocrinology (UNITED STATES) Dec 1987, 121 (6) p2131-40, ISSN 0013-7227 Journal Code: ECC

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Languages: ENGLISH

Thyroid enlargement in response to chronic hypersecretion of TSH reflects the coordinated growth of both parenchyma and stroma. Because Wollman et al. observed in propylthiouracil-fed rats that enlargement and remodeling of thyroid capillaries were strictly localized around follicles, they hypothesized that growth of perifollicular blood vessels is stimulated by angiogenic factors secreted by neighboring follicular epithelial cells. In support of this hypothesis, we report that media conditioned by rat thyroid cells were very active in an in vitro angiogenesis bioassay that measures stimulation of endothelial cell migration through chemotaxis membranes in microwell Boyden chamber assemblies. Primary cultures of thyroid cells from collagenase-dispersed glands from male or female Holtzman rats fed 0.01% propylthiouracil in the drinking water released activity that produced up to 5-fold increases in endothelial cell migration rates relative to those in identical unconditioned medium. Thyroid-derived activity was primarily chemotactic (i.e. only weakly chemokinetic) to both rabbit aortic and microvascular endothelial cells. That endotheliotropic activity is derived from thyroid parenchyma is indicated by the finding that media conditioned by FRTL cells, a clonally derived thyroid follicular epithelial cell line, produced parallel chemoattractant responses. Thyroid-conditioned media were also chemoattractant to mouse BALB/c-3T3 cells, which have endothelial cell characteristics. In contrast, thyroid-conditioned media did not increase the high spontaneous migration rate of Walker rat sarcoma (WR256) cells. T4, T3, thyroglobulin, bovine fibroblast growth factor (alpha and beta), and media conditioned by rabbit endothelial cells were inactive. Chemoattractant activity in serum containing conditioned media was retained by both 10,000 and 30,000 mol wt cut-off (MWCO) ultrafilters. Activity in serum-free thyroid-conditioned media was largely retained by 10,000 MWCO filters, but only partially retained by 30,000 MWCO filters; activity in the 30,000 filtrate was recoverable in a 10,000 MWCO retentate. These findings support the hypothesis that capillary growth during thyroid enlargement occurs, at least in part, as a result of a parenchymal-stromal (epithelial-mesenchymal) paracrine interaction mediated by specific endotheliotropic (angiogenic) factors released by follicular epithelial cells and distinct from T3, T4, and thyroglobulin.

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1. 4,882,275, Nov. 21, 1989, Method of purifying **endothelial** cell growth factors using immobilized heparin; Michael Klagsbrun, * ; **210*660**; **530*413**, 416

US PAT NO: 4,882,275 L3: 1 of 9

ABSTRACT:
Endothelial cell **growth** **factor** (ECG) from various sources possesses a strong and specific affinity for heparin. This strong affinity of ECG for heaprin enables removal of undesired impurities from a mixture comprising ECG by: (a) contacting immobilized heparin with the mixture to form a heparin-ECG complex; (b) separating uncomplexed mixture from the complex; and (c) contacting the complex with a salt solution of a salt concentration and pH effective to separate the ECG from the heparin. The resulting purified ECG (or fragment thereof) is useful in therapeutics and as an additive for cell culturing. The purified ECG is also useful to raise antibodies that are used in therapeutics and in ECG immunoassays.

2. 4,879,237, Nov. 7, 1989, Use of peptides in control of cell attachment and detachment; Eric I. Rudslahti, et al., 435*240.2, 240.21; **530*331**

US PAT NO: 4,879,237 L3: 2 of 9

ABSTRACT:
A method of using synthetic cell attachment-promoting peptides from fibronectin to detach cultured cells from the substratum is described.

3. 4,870,160, Sep. 26, 1989, Polypeptides with laminin activity; Aristidis S. Charonis, et al., **530*326**

US PAT NO: 4,870,160 L3: 3 of 9

ABSTRACT:
A composition which can bind heparin and promote cellular adhesion is provided which consists essentially of a polypeptide of the formula: ##EQU1##

This invention was made with Government support under contract number CA 29995 by the U.S.

The Government has certain rights in the invention.

4. 4,863,726, Sep. 5, 1989, Combination therapy using immunotoxins with interleukin-2; Paul Stevens, et al., 424*85.2, 85.1, 85.8, 85.91; 514*2, 8, 21, 885; **530*351**, **389**, **391**

US PAT NO: 4,863,726 L3: 4 of 9

ABSTRACT:
Anti-tumor activity in humans can be augmented by administering to the mammalian host a pharmacologically effective amount of mammalian IL-2 and at least one immunotoxin that binds selectively to human tumor cells. The IL-2 and immunotoxin are preferably administered separately to the host. The composition is useful for prophylactic or therapeutic treatment of such cancers as ovarian and breast cancer.

5. 4,839,464, Jun. 13, 1989, Polypeptides with fibronectin activity; James B. McCarthy, et al., **530*326**

US PAT NO: 4,839,464 L3: 5 of 9

ABSTRACT:
A composition which can bind heparin and promote cellular adhesion and neurite outgrowth is provided which consists essentially of a polypeptide of the formula: ##EQU1## Medical devices such as prosthetic implants, percutaneous devices and cell culture substrates coated with the polypeptide composition are also provided.

6. 4,785,079, Nov. 15, 1988, Isolation of fibroblast **growth** **factor**; Denis Gospodarowicz, et al., **530*399**, **412**, **413**, **416**, **417**, **418**, **419**, **420**, **422**

US PAT NO: 4,785,079 L3: 6 of 9

ABSTRACT:
Basic Fibroblast **Growth** **Factor** (FGF) is substantially purified by the employment of affinity chromatography using heparin-linked support material. Described is a simplified three step procedure for extracting basic FGF from either mammalian brain or mammalian pituitary tissue. Salt precipitation, e.g., with ammonium sulfate is used to provide a partially purified precipitate that is then subjected to ion-exchange chromatography, e.g., using a Carboxymethyl-Sephadex column. Substantially pure basic FGF fractions are then obtained by fractionating the further partially purified fractions using affinity chromatography on a heparin-linked support e.g., Heparin-Sepharose.

7. 4,760,131, Jul. 26, 1988, Wound-healing composition; John S. Sundsmo, et al., **530*356**; 128*156, DIG.8; 427*2; 514*2, 21, 54, 56, 62, 801

US PAT NO: 4,760,131 L3: 7 of 9

ABSTRACT:
A soft tissue wound healing composition comprising an aqueous mixture of fibrillar collagen, heparin, and undegranulated platelets or platelet releasate. The composition is applied topically to the wound site in conjunction with means to keep it at the site and hydrated or in the form of an occlusive dressing.

8. 4,693,718, Sep. 15, 1987, Stimulation of chemotaxis by chemotactic peptides; Dan W. Urry, et al., 623*11; 427*2; **530*328**; 623*66

US PAT NO: 4,693,718 L3: 8 of 9

ABSTRACT:
A method of stimulating chemotaxis toward a prosthetic device is disclosed, which method comprises incorporating a chemotactic peptide of the formula ##EQU1## wherein A is a peptide-forming residue of L-alanine:
P is a peptide-forming residue of L-proline;
G is a peptide-forming residue of glycine;
V is a peptide-forming residue of L-valine;
F is a peptide-forming residue of L-phenylalanine;
B.sup.1 is H or a biocompatible N-terminal group;
B.sup.2 is OH, OB.sup.3 where B.sup.3 is a non-toxic metal ion, or a biocompatible C-terminal group:
X is GVPGFGVG, VPGFGVG, PGFGVG, GFGVG, FGVG, GVG, VG, G or a covalent bond;
Y is AGVPGFGV, AGVPGFG, AGVPGF, AGVPG, AGVP, AGV, AG, A or a covalent bond; and
n is an integer from 1 to 100;
into a surface of the prosthetic device. Prosthetic devices which have the property of enhancing invasion of elastic fiber synthesizing

fibroblasts as a result of the chemotactic peptide are also disclosed.

9. 4,605,413, Aug. 12, 1986, Stimulation of chemotaxis by chemotactic peptides; Dan W. Urry, et al., 623*11; 424*422; 427*2; **530*329**, **351**; 623*66

US PAT NO: 4,605,413 L3: 9 of 9

ABSTRACT:
A method of stimulating chemotaxis toward a prosthetic device is disclosed, which method comprises incorporating a chemotactic peptide of the formula ##EQU1## wherein A is a peptide-forming residue of L-alanine;
P is a peptide-forming residue of L-proline;
G is a peptide-forming residue of glycine;
V is a peptide-forming residue of L-valine;
B.sup.1 is H or a biocompatible N-terminal group;
B.sup.2 is OH, OB.sup.3 where B.sup.3 is a non-toxic metal ion, or a biocompatible C-terminal group;
X is FPVGV, GVGV, VGV, GV, V, or a covalent bond;
Y is APGVG, APGV, APG, AP, A, or a covalent bond; and
n is an integer from 1 to 100;
into a surface of the prosthetic device. Prosthetic devices which have the property of enhancing invasion of elastic fiber synthesizing fibroblasts as a result of the chemotactic peptide are also disclosed.

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L5 6 GROWTH(W)FACTOR AND FOLLICUL?

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1. 4,879,225, Nov. 7, 1989, Enhanced production of antibodies utilizing insolubilized immune complexes; Alton C. Morgan, Jr., et al., * ; 424*85.8, 88; 435*172.2, 240.27; 935*103, 106, 107

US PAT NO: 4,879,225 L5: 1 of 6

ABSTRACT:
A method for enhancing production of antibodies through immunization with insolubilized immune complexes is disclosed. Purified antigen or heterogeneous antigen mixtures may be combined with polyclonal or monoclonal antibody and the resultant complex bound to insolubilized protein A to form insolubilized immune complexes. Methods for improving the immunogenicity of a soluble antigen and for producing monoclonal anti-idiotypic antibodies are also disclosed. Monoclonal antibodies that are specific for a distinct, as yet unrecognized epitope may be produced by another disclosed method. Insolubilized immune complexes, comprising antigen and antibody that is either directly linked to Sepharose.RTM. or absorbed onto insolubolized protein A, and immunosorbents, comprising antibody absorbed onto insolubilized protein A, are also disclosed.

2. 4,855,285, Aug. 8, 1989, Antigenic modification of polypeptides; Vernon C. Stevens, 514*12, 13

US PAT NO: 4,855,285 L5: 2 of 6

ABSTRACT:
Endogenous and exogenous proteins, and fragments thereof, are chemically modified outside the body of an animal so that when injected into the animal they produce more antibodies against the unmodified protein than would injection of the unmodified protein or fragment alone. The chemical modification may be accomplished by attaching the proteins or fragments to carriers such as, for example, bacterial toxoids. The chemical modification can also be accomplished by polymerization of protein fragments. Proteins which can be modified include Follicle Stimulating Hormone and Human Chorionic Gonadotropin. The modified polypeptides may be administered to animals for the purpose of contraception, abortion or treatment of hormone-related disease states and disease disorders, treatment of hormone-associated carcinomas, and to boost the animals resistance to exogenous proteins, for example viral proteins.

3. 4,814,323, Mar. 21, 1989, Process for the treatment and the prevention of AIDS and other disorders induced by the LAV/HTLV III virus; J. M. Andrieu, et al., 514*11, 885, 934

US PAT NO: 4,814,323 L5: 3 of 6

ABSTRACT:
The invention relates to a process for the treatment and the prevention of the acquired immunodeficiency syndrome (AIDS) and AIDS related complex (ARC) induced by the LAV/HTLV III virus in a patient infected with said virus, comprising administering to said patient an effective amount of a compound selected from cyclosporins.

4. 4,798,885, Jan. 17, 1989, Compositions of hormonally active human and porcine inhibin containing an .alpha. chain and 62 chain; Anthony J. Mason, et al., 530*350

US PAT NO: 4,798,885 L5: 4 of 6

ABSTRACT:
DNA encoding the prepro inhibin .alpha. and .beta. chains has been isolated. This DNA is ligated into expression vectors and used to transform host cells for the preparation of inhibin or activin. Also provided are prohormone domains and other inhibin .alpha. or .beta. chain derivatives having therapeutic or diagnostic interest. The compositions provided herein are useful in the manipulation of fertility in animals.

5. 4,713,366, Dec. 15, 1987, Antigenic modification of polypeptides; Vernon C. Stevens, 514*13; 530*326, 403

US PAT NO: 4,713,366 L5: 5 of 6

ABSTRACT:
Endogenous and exogenous proteins, and fragments thereof, are chemically modified outside the body of an animal so that when injected into the animal they produce more antibodies against the unmodified protein than would injection of the unmodified protein or fragment alone. The chemical modification may be accomplished by attaching the proteins or fragments to carriers such as, for example, bacterial toxoids. The chemical modification can also be accomplished by polymerization of protein fragments. Proteins which can be modified include Follicle Stimulating Hormone and Human Chorionic Gonadotropin. The modified polypeptides may be administered to animals for the purpose of contraception, abortion or treatment of hormone-related disease states and disease disorders, treatment of hormone-associated carcinomas, and to boost the animals resistance to exogenous proteins, for example viral proteins.

6. 4,708,818, Nov. 24, 1987, Human immunodeficiency viruses associated with Acquired Immune Deficiency Syndrome (AIDS), a diagnostic method for AIDS and pre-AIDS, and a kit therefor; Luc Montagnier, et al., 435*5, 7, 188, 235, 810; 436*506, 510, 518, 537, 540, 546, 804, 808, 811

US PAT NO: 4,708,818 L5: 6 of 6

ABSTRACT:
Retroviruses associated with Acquired Immune Deficiency Syndrome (AIDS), including Lymphadenopathy Associated Virus (LAV), are isolated from the sera of patients afflicted with Lymphadenopathy Syndrome (LAS) or AIDS. LAV is a Human Immunodeficiency Virus (HIV). Viral extract, structural proteins and other fractions of the retrovirus immunologically recognize the sera of such patients. Immunological reaction is used to detect antibodies that specifically bind to antigenic sites of the retrovirus in samples of body fluids from patients with AIDS or risk of AIDS. A kit for in vitro assay of LAS or AIDS is provided.

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